

WHAT IS CLAIMED IS:

1. A process for preparing monodisperse strongly basic anion  
exchangers having polyiodide groups comprising
- (A) charging a monodisperse strongly basic anion exchange resin into  
water in a vessel,
- (B) preparing in a second vessel a mixture of iodine, iodide salt, and  
water, and
- (C) circulating the aqueous phase from step (B) over the resin until all  
iodine crystals are dissolved.
2. A process according to Claim 1 wherein the monodisperse  
strongly basic anion exchange resin used in step (A) is a gel-form or  
macroporous resin.
3. A process according to Claim 1 wherein a salt form of the  
monodisperse strongly basic anion exchange resin is used in step (A) .
4. A process according to Claim 1 wherein the iodide salt used  
in process step (B) is an alkali metal iodide, ammonium iodide, or alkaline  
earth metal iodide.
5. A process according to Claim 1 wherein 0.7 to 2.0 mol of  
iodide per mol of the strongly basic anion exchanger in salt form are used.
6. A process according to Claim 1 wherein the resin is loaded  
with the polyiodide solution at temperatures between 10 and 90°C.
7. A monodisperse strongly basic anion exchange resin having  
polyiodide groups obtained by
- (A) charging a monodisperse strongly basic anion exchanger into a  
vessel with water,
- (B) preparing a mixture of iodine, iodide salt, and water in a second  
vessel, and
- (C) circulating the aqueous phase from step (B) over the resin until all  
iodine crystals are dissolved.
8. A resin according to Claim 7 having an iodine release of 3 to  
7 ppm and an iodide release of less than 4 ppm.

9. A method for disinfecting or treating drinking water comprising exposing water in need of disinfection or treatment to a monodisperse strongly basic anion exchange resin having polyiodide groups according to Claim 7.

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11. A method comprising carrying out chemical reactions in the  
10 presence of iodine or polyiodide obtained using a monodisperse strongly basic anion exchange resin having polyiodide groups according to Claim 7.

1004794-12104